

Title (en)
ELECTRICAL CONNECTION DEVICE FOR PRODUCING A SOLDER CONNECTION AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
ELEKTRISCHE ANSCHLUSSEINRICHTUNG ZUR HERSTELLUNG EINER LÖTVERBINDUNG SOWIE VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
DISPOSITIF DE RACCORDEMENT ÉLECTRIQUE POUR LA RÉALISATION D'UNE LIAISON SOUDÉE AINSI QUE PROCÉDÉ POUR SA FABRICATION

Publication
EP 2795729 B1 20151216 (DE)

Application
EP 12818485 A 20121220

Priority
• DE 102011122371 A 20111222
• EP 2012005315 W 20121220

Abstract (en)
[origin: WO2013091880A1] The invention relates to an electrical connection device on a plate-type or strip-type material (1, 1'), which cannot be soldered or is difficult to solder or which is provided with a surface that cannot be soldered or is difficult to solder, having the following characteristics: A self-clinching bolt (5) is provided with a bolt head (7) that, relative to the bolt body (9) beneath, has a tapered cross section such that the bolt head (7) transitions, by way of a conical or shoulder-like sloping flank (11), into the bolt body (9) having an outer circumference (9') that has a diameter larger than that of the bolt head (7). The outer circumference (9') of the bolt body (9) is of smooth design, or is provided with a knurling (15). In the penetration area of the self-clinching bolt (5), the plate-type or strip-type material (1, 1') is provided with a non-flanged material edge (101). Within the material edge (101), the self-clinching bolt (5) is press-fit with a peripheral area of the bolt body (9) thereof, thus creating a force fit.

IPC 8 full level
H01R 9/05 (2006.01); **H01R 12/58** (2011.01); **H01R 43/02** (2006.01); **H01Q 1/12** (2006.01); **H01R 4/02** (2006.01); **H01R 4/10** (2006.01); **H01R 101/00** (2006.01)

CPC (source: EP US)
H01R 4/02 (2013.01 - US); **H01R 9/0515** (2013.01 - EP US); **H01R 43/02** (2013.01 - US); **H01Q 1/1207** (2013.01 - EP US); **H01R 4/023** (2013.01 - EP US); **H01R 4/10** (2013.01 - EP US); **H01R 12/58** (2013.01 - EP US); **H01R 2101/00** (2013.01 - EP US); **H01R 2201/00** (2013.01 - EP US); **Y10T 29/49179** (2015.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102011122371 A1 20130627; CN 104054217 A 20140917; CN 104054217 B 20161116; EP 2795729 A1 20141029; EP 2795729 B1 20151216; KR 101899997 B1 20180918; KR 20140131319 A 20141112; US 2015000976 A1 20150101; US 9692143 B2 20170627; WO 2013091880 A1 20130627

DOCDB simple family (application)
DE 102011122371 A 20111222; CN 201280067267 A 20121220; EP 12818485 A 20121220; EP 2012005315 W 20121220; KR 20147020470 A 20121220; US 201214367162 A 20121220